

REMARKS/ARGUMENTS

Favorable reconsideration of this application in view of the present amendments and following remark is respectfully requested.

Claims 1, 5-7, 9-11, 15, 18-19 and 23-24 are pending in this amendment. By this amendment, Claims 1 and 11 are amended; and no claims are cancelled or added herewith. The amendments to Claims 1 and 11 are supported in the specification at least by page 10, line 25 - page 13, 11, and Fig. 2. It is respectfully submitted that no new matter is added by this amendment.

In the outstanding Office Action, Claims 1, 5-7, 9 and 10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over JP 2000331998 to Kazumi in view of U.S. Patent No. 5,234,526 to Chen; and Claims 11, 15, 18, 19, 23 and 24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kazumi in view of Chen and further in view of U.S. 2002/0020498 to Ohmi.

It is respectfully submitted that the applied art does not teach or suggest that a thickness of the sidewall portion between the chamber sidewalls and the plasma generation region is constant and is not smaller than $\lambda_g/4$ but not greater than λ_g , and a thickness of the flat plate portion 4a between the antenna 3 and the plasma generation region is not smaller than $\lambda_g/4$ but not greater than λ_g , λ_g being a wavelength of the microwave, as recited in Claim 1 and similarly recited in Claim 11.

In contrast, Chen discusses that the microwave-penetrable substance 9 is shaped as a disk and has a specified thickness and a diameter equal to the diameter of plasma generation chamber 1. Substance 9 is inserted and fixed to the upper surface of plasma generation chamber 1 so that the disk-shaped substance 9 is in contact both with the upper wall of plasma generation chamber 1 and the lower wall of microwave-penetrable substance 8.

Matching is obtained when the thickness of microwave-penetrable substance 9 is made equal to $1/4$ of the wavelength inside waveguide 2.

Accordingly, the features of the claimed invention are not taught by the applied art. Again, amended Claims 1 and 11 recite in part that a thickness of the sidewall portion between the chamber sidewalls and the plasma generation region is constant and is not smaller than $\lambda_g/4$ but not greater than λ_g . Chen merely discusses that the thickness of microwave-penetrable substance 9 is made equal to $1/4$ of the wavelength inside waveguide 2. As such, Chen does not suggest the thickness of the sidewall portion 4b between the chamber sidewall and the plasma generation region but teaches about the thickness of the flat plate portion. Due to the different configuration between the claimed invention and Chen, Chen cannot achieve the effect of reducing the number of interference patterns produced in the side wall portion 4b to produce the plasma stably, which can be obtained by one or more embodiments of the present invention. Accordingly, it is respectfully requested that the rejection for amended claims 1 and 11 be withdrawn.

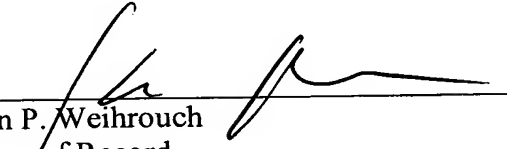
For at least the reasons discussed above, it is respectfully requested that the rejection of the claims under 35 U.S.C. § 103(a) based on Kazumi, Chen and Ohmi be withdrawn.

Consequently, for the reasons discussed in detail above, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal allowance. Therefore, a Notice of Allowance is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact the undersigned representative at the below listed telephone number.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, L.L.P.



Steven P. Weihrouch
Attorney of Record
Registration No. 32,829

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/09)

Kevin M. McKinley
Registration No. 43,794

2153376_1.DOC